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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,619	12/27/2003	Vladimir S. Moxson		7498

7590 04/22/2010  
ADVANCE MATERIALS PRODUCTS, INC.  
1890 GEORGETOWN ROAD  
HUDSON, OH 44236

EXAMINER
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ZHU, WEIPING

ART UNIT	PAPER NUMBER
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1793

MAIL DATE	DELIVERY MODE
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04/22/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b></p>	<b>Application No.</b> 10/748,619	<b>Applicant(s)</b> MOXSON ET AL.	
	<b>Examiner</b> WEIPING ZHU	<b>Art Unit</b> 1793	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 05 April 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
 b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
 (b) ☐ They raise the issue of new matter (see NOTE below);  
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
 5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
 6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
 The status of the claim(s) is (or will be) as follows:  
 Claim(s) allowed: \_\_\_\_\_.  
 Claim(s) objected to: \_\_\_\_\_.  
 Claim(s) rejected: 2,3,17,19,21 and 22.  
 Claim(s) withdrawn from consideration: 5-14.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: of the reasons as stated in the final rejection.  
 12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_  
 13. ☒ Other: See Continuation Sheet.

/ Roy King/  
Supervisory Patent Examiner, Art Unit 1793

/Weiping Zhu/  
Examiner, Art Unit 1793

Continuation of 13. Other: Claims 2, 3, 17, 19, 21 and 22 are currently under examination, wherein no claim has been amended in applicant's amendment filed on April 5, 2010. Claim 20 has been cancelled in the same amendment. Therefore, the previous rejection of claim 20 under 35 U.S.C. 103(a) as being unpatentable over Brupbacher et al. (US 5,059,490) in view of Gottselig et al. (US 4,961,529) as stated in the Office action dated February 16, 2010 has been withdrawn. The previous rejections of claims 2, 3, 17, 19, 21 and 22 under 35 U.S.C. 103(a) as being unpatentable over Brupbacher et al. ('490) in view of Gottselig et al. ('529) and further in view of Kugler (US 4,410,412) as stated in the Office action dated February 16, 2010 have been maintained.

In response to applicant's arguments filed on April 5, 2010 that 1) Gottselig et al. ('529) does not relate to titanium matrix composite at all and the claimed Ti<sub>3</sub>SiC<sub>2</sub> would not be formed during sintering in the presence of SiC and Ti; 2) Kugler ('412) does not relate to titanium matrix composite at all and an electrode comprising both titanium carbides and vanadium (or zirconium) aluminides will be destroyed by erosion soon; and 3) the prior art references do not disclose the instantly claimed titanium matrix composite having improved mechanical properties, the examiner notes that 1) the ground of rejection of the claimed titanium matrix composite relies on the teaching of Brupbacher et al. ('490) rather than that of Gottselig et al. ('529) and Gottselig et al. ('529) does teach the formation of Ti<sub>3</sub>SiC<sub>2</sub> during sintering in the presence of SiC and Ti (abstract); 2) the ground of rejection of the claimed titanium matrix composite relies on the teaching of Brupbacher et al. ('490) rather than that of Kugler ('412) and Kugler ('412) does teach that the carbides of Brupbacher et al. ('490) in view of Gottselig et al. ('529) (e.g. TiC) and Al<sub>8</sub>V<sub>5</sub> are functionally equivalent (col. 1, lines 34-40 and Example 2), therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the carbides of Brupbacher et al. ('490) in view of Gottselig et al. ('529) (e.g. TiC) with the claimed Al<sub>8</sub>V<sub>5</sub> in the titanium matrix composite material of Brupbacher et al. ('490) in view of Gottselig et al. ('529) with an expectation of success, and Brupbacher et al. ('490) in view of Gottselig et al. ('529) and further in view of Kugler ('412) is not directed to an electrode comprising both titanium carbides and vanadium (or zirconium) aluminides at all; and 3) No mechanical properties are recited in the instant claims, and therefore Brupbacher et al. ('490) in view of Gottselig et al. ('529) and further in view of Kugler ('412) is not required to disclose such properties of the titanium matrix composite materials in order to render the claimed materials obvious.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Weiping Zhu whose telephone number is 571-272-6725. The examiner can normally be reached on 8:30-16:30 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.